

**RARE-01. CEREBRAL INFARCTION IN CHILDHOOD-ONSET CRANIOPHARYNGIOMA PATIENTS: RESULTS OF KRANIOPHARYNGEOM 2007**

Svenja Boekhoff<sup>1</sup>, Brigitte Bison<sup>2</sup>, Maria Eveslage<sup>3</sup>, Carsten Friedrich<sup>1</sup>, Jörg Flitsch<sup>4</sup>, Hermann L. Müller<sup>1</sup>; <sup>1</sup>Dept. of Pediatrics and Pediatric Hematology/Oncology, University Children's Hospital, Klinikum Oldenburg AöR, Oldenburg, Germany. <sup>2</sup>Dept. of Neuroradiology, University of Augsburg, Augsburg, Germany. <sup>3</sup>Institute of Biostatistics and Clinical Research, University of Münster, Münster, Germany. <sup>4</sup>Dept. of Neurosurgery, University Hospital UKE, Hamburg, Germany

**BACKGROUND:** Cerebral infarction (CI) is a known vascular complication following treatment of suprasellar tumors. Risk factors for CI, incidence rate, and long-term prognosis are unknown for patients with childhood-onset craniopharyngioma (CP). **METHODS:** MRI of 244 CP patients, recruited between 2007 and 2019 in KRANIOPHARYNGEOM 2007, were reviewed for CI. Risk factors for CI and outcome after CI were analyzed. **RESULTS:** Twenty-eight of 244 patients (11%) presented with CI based on reference assessment of MRI. One CI occurred before initial surgery and one case of CI occurred after release of intracystic pressure by a cyst catheter. 26 of 28 CI were detected after surgical tumor resection at a median postoperative interval of one day (range: 0.5 - 53 days). Vascular lesions during surgical procedures were documented in 7 cases with CI. No relevant differences with regard to surgical approaches were found. In all 12 irradiated patients, CI occurred before irradiation. Multivariable analyses showed that hydrocephalus and gross-total resection at the time of primary diagnosis / surgery both were risk factors for CI. After CI, quality of life (PEDQOL) and functional capacity (FMH) were impaired. **CONCLUSIONS:** CI occurs in 11% of surgically-treated CP cases. Degree of resection and increased intracranial pressure are risk factors, which should be considered in the planning of surgical procedures for prevention of CI.